

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

Bernth Johansson
Head of Research & Development
Malå Geoscience
Skolgatan 11
S-930 70 Malå
Sweden

COPY MAILED

MAR 26 2003

OFFICE OF PETITIONS

In re Application of
Johansson et al.
Application No. 10/079,807
Filed: February 22, 2002
For: GROUND PENETRATING RADAR
ARRAY AND TIMING CIRCUIT

:
:
: LETTER
:
:
:


AVAILABLE COPY

Dear Mr. Johansson,

You are named as a joint inventor in the above identified United States patent application, filed under the provisions of 35 U.S.C. 116 (United States Code), and 37 CFR 1.47(a) (Rules of Practice for the United States Patent and Trademark Office [USPTO]). Should a patent be granted on the application, you will be designated therein as a joint inventor.

As a named inventor, you are entitled to inspect any paper in the file wrapper of the application, order copies of all or any part thereof (at a prepaid cost pursuant to 37 CFR 1.19), or make your position of record in the application. Alternatively, you may do any of the aforementioned through an attorney or agent registered to practice before the USPTO and presenting written authorization from you. If you care to join in the application, counsel of record (see below) would presumably assist you. Joining in the application would entail the filing of an appropriate oath or declaration by you pursuant to 37 CFR 1.63.

Requests for information regarding this application should be directed to the File Information Unit at (703) 308-2733. For information on how to order a copy of the application or a specific paper in the application, contact the Certification Division at (703) 308-9726 or 1-(800) 972-6382 (outside the Washington DC area). Telephone inquiries regarding this letter should be directed to the undersigned at (703) 308-0763.


RC Tang
Petitions Attorney
Office of Petitions

cc: Kenneth M. Lesch, Esq.
Finnegan, Henderson, Farabow,
Garrett & Dunner, LLP
1300 I Street, N.W.
Washington, DC 20005

FAX COVER SHEET

DHL Airways, Inc

CSC Special Services

Diane Green

Tel: 800 345 3579, ext 8225

Tel: 480 303 5750, ext 8225

Fax: 001 480 636 2474

Fax: 001 480 303 2452

Email: lgreen@us.dhl.com



To: Chip Portser / Finnegan & Henderson Date: 5/25/01
Fax: 202-216-5136 Pages: 2
Phone: 202-408-4215
Re: AWB # 8306181660 DCA/ARN

Notes: ☐ Please Reply ☒ Per Your Request ☐ FYI Only

Hard Copy Proof of Delivery
from Post Office
Delivered 5/11, signed by Lea?

Förpacknings 16.00		15		NR. 476 S. 1/1	
DHL INTERNATIONAL AB		15 45 42-5		ADRESSPOST	
CARGO CITYVÄGEN, HUS 79 180 45 STOCKHOLM-MARLADA					
TILL				AVSENDER	
Förpacknings 16.00				B.B/O.L	
Förpacknings 16.00				2001-05-11	
Förpacknings 16.00				BOSTRÖMS ÅKER	
Förpacknings 16.00				3133 473 922 6SE	
Förpacknings 16.00				190 029 420 6	
Förpacknings 16.00				15	

Att. Diane Green



1300 I Street, NW • Washington, DC 20005-3315 • 202.408.4000 • Fax 202.408.4400
www.finnegan.com

KENNETH M. LESCH
202.408.4281
kenneth.lesch@finnegan.com

May 23, 2002

Bernth Johansson
Head of Research & Development
MALÅ GeoScience
SKOLGATAN 11
S-930 70 MALÅ
SWEDEN

VIA FEDEX

U.S. Patent Application 10/079,807
Inventors: Bernth Johansson et al.
Title: Ground Penetrating Radar Array and
Timing Circuit
Our Reference: 07582.0005-02000

Dear Bernth:

Thank you for your letter of January 14, 2002, explaining why you have not signed a Declaration and Power of Attorney.

To avoid losing patent rights to this invention, we filed the above-referenced continuation application. In order for this patent application to proceed, the U.S. Patent and Trademark Office (PTO) has requested a Declaration from each of the inventors. Therefore, please execute the enclosed Declaration and Power of Attorney in order to comply with the PTO's rules.

Please return the Declaration and Power of Attorney as soon as possible. The Declaration and Power of Attorney is due to be filed in the U.S. Patent and Trademark Office on **June 12, 2002**, a date that may be extended by payment of appropriate government fees. For your convenience, we enclose a copy of Patent Application No. 10/079,807, filed on February 22, 2002.

If you have any questions, please contact us.

Sincerely,

A handwritten signature in black ink that reads "Kenneth M. Lesch".

Kenneth M. Lesch

KML/aml
Enclosures

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L. L. P.

1300 I STREET, N. W.
WASHINGTON, DC 20005-3315

202 • 408 • 4000
FACSIMILE 202 • 408 • 4400

ATLANTA
404 • 653 • 6400
PALO ALTO
650 • 849 • 6600

WRITER'S DIRECT DIAL NUMBER:
202 • 408 • 4281
KENNETH.LESCH@FINNEGAN.COM

TOKYO
011 • 813 • 3431 • 6943
BRUSSELS
011 • 322 • 646 • 0353

December 4, 2000

Bernth Johansson
Head of Research & Development
Mala GeoScience
SKOLGATAN 11
S-93 70 MALA
SWEDEN

Re: U.S. Patent Application 09/658,188
Inventors: Anthony J. Devaney
Bernth Johansson, and Alan J. Witten
Title: Ground Penetrating Radar Array and
Timing Circuit
Our Reference: 07582.0005-00000

Dear Bernth:

We enclose a Declaration and Power of Attorney. Please execute the Declaration and Power of Attorney and return it to me.

The Declaration and Power of Attorney is due to be filed in the U.S. Patent and Trademark Office on **December 27**, a date that may be extended by payment of appropriate government fees.


If you have any questions, please feel free to contact me.

With best regards,

Very truly yours,



Kenneth M. Lesch*

KML/gdt
Enclosures
cc: 

*Admitted to Massachusetts; not admitted to District of Columbia

7582-5

FAEGRE & BENSON LLP

CONFIRMATION COPY

2200 WELLS FARGO CENTER, 90 SOUTH SEVENTH STREET
MINNEAPOLIS, MINNESOTA 55402-3901

TELEPHONE 612-336-3000
FACSIMILE 612-336-3026

WALTER C. LINDER
612/336-3478

January 22, 2001

BY TELECOPY

Frank A. De Costa, III, Esq.
Finnegan, Henderson, Farabow,
Garrett & Dunner, L.L.P.
1300 I Street, N.W.
Washington, D.C. 20005-3315

RECEIVED

JAN 26 2001

**FINNEGAN, HENDERSON
FARABOW, GARRETT & DUNNER, L.L.P.**

Re: U.S. Patent Application Serial No. 09/658,188
Title: GROUND PENETRATING RADAR ARRAY AND TIMING
CIRCUIT
Filed: September 8, 2000
Your File: 07582.0005-00000
[REDACTED]

Dear Mr. De Costa:

[REDACTED]

With respect to the U.S. Patent Application Serial No. 09/658,188, filed on September 8, 2000, we have received Mr. Lesch's December 4, 2000, letter and attachments regarding a need to complete the missing parts of the application. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

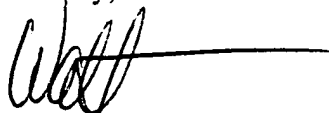
Accordingly, Mr. Johansson will sign the declaration and power of attorney for this application only upon receipt of the written assignment of the application to MALÅ. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Sincerely,



Walter C. Linder

WCL:er

Enclosure

M2:20361003.01

cc: J. Rynning
T. Leijon
H. Kaplan

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L. L. P.

1300 I STREET, N. W.
WASHINGTON, DC 20005-3315

202 • 408 • 4000
FACSIMILE 202 • 408 • 4400

ATLANTA
404 • 653 • 6400
PALO ALTO
650 • 849 • 6600

WRITER'S DIRECT DIAL NUMBER:
202 • 408 • 4281
KENNETH.LESCH@FINNEGAN.COM

TOKYO
011 • 813 • 3431 • 6943
BRUSSELS
011 • 322 • 646 • 0353

May 8, 2001

Via Facsimile & DHL

Bernth Johansson
M.Sc. Engineering Physics
Head of Research & Development
MALÅ GeoScience
SKOLGATAN 11
S-930 70 MALÅ
SWEDEN

U.S. Patent Application 09/658,188
Title: Ground Penetrating Radar Array and Timing Circuit
Our Reference: 07582.0005

Dear Bernth:

We enclose a Declaration and Power of Attorney. Please execute the Declaration and Power of Attorney and return it to me as soon as possible. We forwarded these papers to you on December 4, 2000, but we never received a response. For your convenience, we include a copy of the patent application as filed on September 8, 2000.

When we receive the executed Declaration and Power of Attorney we will file it in the U.S. Patent and Trademark Office. If we do not file the enclosed Declaration and Power of Attorney by **May 27, 2001**, this application may go abandoned, which would not be beneficial to either Malå GeoScience or Witten Technologies.

Bernth Johansson
May 8, 2001
Page 2

If you have any questions or comments, please feel free to contact me.

With best regards,

Sincerely,



Kenneth M. Lesch*

KML/aml
Enclosures

cc:

[REDACTED]
[REDACTED]
Walter C. Linder, Esq. (w/ Declaration and Power of Attorney)
[REDACTED]
[REDACTED]

* Admitted in Massachusetts; admitted to practice before the U.S. Patent and Trademark Office, practice limited thereto; not admitted in the District of Columbia.

** JOB STATUS REPORT **

AS OF JAN 2002 17:57

PAGE. 01

FINNEGAN HENDERSON

JOB #895

	DATE	TIME	TO/FROM	MODE	MIN/SEC	PGS	STATUS
001	1/08	17:41	0114695334567	G3--S	14' 31"	045	OK

GKM

*Lotterhos
910*

LAW OFFICES
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.
1300 I Street, N.W.
Washington, DC 20005

Telephone
(202) 408-4000

Facsimile
(202) 408-4400

FACSIMILE TRANSMITTAL

TO

Name: Bernth Johansson **Phone No.:** 011-46-953-34550
Firm: Mala GeoScience **Date:** January 8, 2002
Fax No.: 011-46-953-34567
Subject: Ground Penetrating Radar Array and Timing Circuit

FROM

Name: Kenneth M. Lesch **Phone** 202-408-4281
No.:
Fax # Verified by: A. Lotterhos **# Pages (incl. this):** 45
Our File No.: 07582.0005-00000

Confirmation Copy to Follow: Yes, via DHL

Message:

If there is a problem with this transmission, notify fax room at (202) 408-4174 or the sender at the number above.

This facsimile is intended only for the individual to whom it is addressed and may contain information that is privileged, confidential, or exempt from disclosure under applicable law. If you have received this facsimile in error, please notify the sender immediately by telephone (collect), and return the original message by first-class mail to the above address.



KENNETH M. LESCH
202.408.4281
kenneth.lesch@finnegan.com

January 8, 2002

Via Facsimile and DHL

Bernth Johansson
M.Sc. Engineering Physics
Head of Research & Development
MALÅ GeoScience
SKOLGATAN 11
S-930 70 MALÅ
SWEDEN

U.S. Patent Application 09/866,575
Inventors: Bernth Johansson et al.
Title: Ground Penetrating Radar Array and Timing Circuit
Our Reference: 07582.0005-01000

Dear Bernth:

We enclose a Declaration and Power of Attorney. We have previously forwarded this to you, but have not received a response. Please execute the Declaration and Power of Attorney and return it to me as soon as possible. For your convenience, we enclose a copy of the patent application filed as a continuation application No. 09/866,575 on May 29, 2001. The Declaration and Power of Attorney is due to be filed in the U.S. Patent and Trademark Office (PTO) on **January 23, 2002**.

If you have any questions, please contact us.

With best regards,

Sincerely,

Kenneth M. Lesch

KML/aml
Enclosures
cc:

[REDACTED]
[REDACTED]
Walter C. Linder, Esq. (w/enclosures)
[REDACTED]
[REDACTED]

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first, and sole inventor (if only one name is listed below) or an original, first, and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: Ground Penetrating Radar Array and Timing Circuit the specification of which ☐ is attached and/or ☒ was filed on May 29, 2001 as United States Application Serial No. 09/866,575 or PCT International Application No. [Text] and was amended on [Text] (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate or § 365(a) of any PCT international application(s) designating at least one country other than the United States, listed below and have also identified below, any foreign application(s) for patent or inventor's certificate, or any PCT International application(s) having a filing date before that of the application(s) of which priority is claimed:

Country	Application Number	Date of Filing	Priority Claimed Under 35 U.S.C. 119
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

Application Number	Date of Filing

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) or § 365(c) of any PCT International application(s) designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application(s) in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application(s) and the national or PCT International filing date of this application:

Application Number	Date of Filing	Status (Patented, Pending, Abandoned)
09/658,188	September 8, 2000	Abandoned

I hereby appoint the following attorney and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. **FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.**, **CUSTOMER NUMBER 22,852**, Douglas B. Henderson, Reg. No. 20,291; Ford F. Farabow, Jr., Reg. No. 20,630; Arthur S. Garrett, Reg. No. 20,338; Donald R. Dunner, Reg. No. 19,073; Brian G. Brunsvold, Reg. No. 22,593; Tipton D. Jennings, IV, Reg. No. 20,645; Jerry D. Voight, Reg. No. 23,020; Laurence R. Hefter, Reg. No. 20,827; Kenneth E. Payne, Reg. No. 23,098; Herbert H. Mintz, Reg. No. 26,691; C. Larry O'Rourke, Reg. No. 26,014; Albert J. Santorelli, Reg. No. 22,610; Michael C. Elmer, Reg. No. 25,857; Richard H. Smith, Reg. No. 20,609; Stephen L. Peterson, Reg. No. 26,325; John M. Romary, Reg. No. 26,331; Bruce C. Zotter, Reg. No. 27,680; Dennis P. O'Reilly, Reg. No. 27,932; Allen M. Sokal, Reg. No. 26,695; Robert D. Bajefsky, Reg. No. 25,387; Richard L. Stroup, Reg. No. 28,478; David W. Hill, Reg. No. 28,220; Thomas L. Irving, Reg. No. 28,619; Charles E. Lipsey, Reg. No. 28,165; Thomas W. Winland, Reg. No. 27,605; Basil J. Lewis, Reg. No. 28,818; Martin I. Fuchs, Reg. No. 28,508; E. Robert Yoches, Reg. No. 30,120; Barry W. Graham, Reg. No. 29,924; Susan Haberman Griffen, Reg. No. 30,907; Richard B. Racine, Reg. No. 30,415; Thomas H. Jenkins, Reg. No. 30,857; Robert E. Converse, Jr., Reg. No. 27,432; Clair X. Mullen, Jr., Reg. No. 20,348; Christopher P. Foley, Reg. No. 31,354; John C. Paul, Reg. No. 30,413; Roger D. Taylor, Reg. No. 28,992; David M. Kelly, Reg. No. 30,953; Kenneth J. Meyers, Reg. No. 25,146; Carol P. Einaudi, Reg. No. 32,220; Walter Y. Boyd, Jr., Reg. No. 31,738; Steven M. Anzalone, Reg. No. 32,095; Jean B. Fordis, Reg. No. 32,984; Barbara C. McCurdy, Reg. No. 32,120; James K. Hammond, Reg. No. 31,964; Richard V. Burgujian, Reg. No. 31,744; J. Michael Jakes, Reg. No. 32,824; Thomas W. Banks, Reg. No. 32,719; Christopher P. Isaac, Reg. No. 32,616; Bryan C. Diner, Reg. No. 32,409; M. Paul Barker, Reg. No. 32,013; Andrew Chanho Sonu, Reg. No. 33,457; David S. Forman, Reg. No. 33,694; Vincent P. Kovalick, Reg. No. 32,867; James W. Edmondson, Reg. No. 33,871; Michael R. McGurk, Reg. No. 32,045; Joann M. Neth, Reg. No. 36,363; Gerson S. Panitch, Reg. No. 33,751; Cheri M. Taylor, Reg. No. 33,216; Charles E. Van Horn, Reg. No. 40,266; Linda A. Wadler, Reg. No. 33,218; Jeffrey A. Berkowitz, Reg. No. 36,743; Michael R. Kelly, Reg. No. 33,921; James B. Monroe, Reg. No. 33,971; Doris Johnson Hines, Reg. No. 34,629; Allen R. Jensen, Reg. No. 28,224; Lori Ann Johnson, Reg. No. 34,498; and David A. Manspeizer, Reg. No. 37,540 and [Text]. Please address all correspondence to **FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.**, 1300 I Street, N.W., Washington, D.C. 20005, Telephone No. (202) 408-4000.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Full Name of First Inventor Bernth Johansson	Inventor's Signature	Date
Residence Hjortornstigen 35		Citizenship Sweden
S-930 70 Malå		

Full Name of Second Inventor Alan J. Witten	Inventor's Signature	Date
Residence 3308 River Walk Court Norman, Oklahoma 73072		Citizenship USA
Full Name of Third Inventor Anthony J. Devaney	Inventor's Signature	Date
Residence 113 Commonwealth Avenue No. 5 Boston, Massachusetts 02116		Citizenship USA



January 14, 2002

Kenneth M. Lesch
Finnegan Henderson
+1 202 408 4400

Via Facsimile

Dear Mr. Lesch

I have received a Declaration and Power of Attorney to be signed and returned to you.

[REDACTED]
[REDACTED] No such licence has been granted and thus we will
not sign the papers. [REDACTED]
[REDACTED]

Best Regards

Bernth Johansson
Head R&D
Malå GeoScience

cc: Robert Leonard
+1 612 766 1600

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

1300 I STREET, N. W.
WASHINGTON, DC 20005-3315

202 • 408 • 4000
FACSIMILE 202 • 408 • 4400

ATLANTA
404 • 653 • 6400
PALO ALTO
650 • 849 • 6600

WRITER'S DIRECT DIAL NUMBER:
202 • 408 • 4281
KENNETH.LESCH@FINNEGAN.COM

TOKYO
011 • 813 • 3431 • 6943
BRUSSELS
011 • 322 • 646 • 0353

September 4, 2001

Bernth Johansson
M.Sc. Engineering Physics
Head of Research & Development
MALÅ GeoScience
SKOLGATAN 11
S-930 70 MALÅ
SWEDEN

VIA DHL

Re: U.S. Patent Application 09/866,575
Inventors: Bernth Johansson et al.
Title: Ground Penetrating Radar Array and
Timing Circuit
Our Reference: 07582.0005-01000

Dear Bernth:

We enclose a Declaration and Power of Attorney. Please execute the Declaration and Power of Attorney and return it to me as soon as possible. For your convenience, we enclose a copy of the patent application filed as a continuation application No. 09/866,575 on May 29, 2001.

The Declaration and Power of Attorney is due to be filed in the U.S. Patent and Trademark Office on **September 23**, a date that may be extended by payment of appropriate government fees.

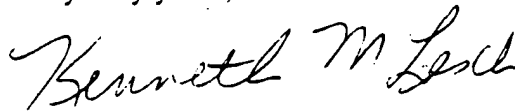
If you have any questions, please feel free to contact me.

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER

Bernth Johansson
September 4, 2001
Page 2

With best regards,

Very truly yours,




Kenneth M. Lesch*

KML/aml
Enclosures

cc:



Walter C. Linder, Esq. (w/Declaration and Power of Attorney)


* Admitted in Massachusetts; admitted to practice before the U.S. Patent and Trademark Office, practice limited to federal courts and agencies; not admitted in the District of Columbia.